

REMARKS

Claims 1-33 are pending. We acknowledge the Examiner's indication that claims 3-7, 9, 10, 14-24 and 29 are allowable if amended to be in independent form and claim 31 is allowed. We submit however that the applicant is entitled to greater protection than that provided by these claims. We have cancelled claims 25 and 26.

Double Patenting rejection

The Examiner's obviousness-type double patenting rejection of claims 25 and 26 is rendered moot by the cancellation of these claims.

Prior Art Rejections

Claims 1, 2, 8, 12, 13, 27, 28, 30, 32 and 33 are rejected under 35 U.S.C. §103(a) as being unpatentable over Sterrett (U.S. 4,039,870) in view of Lloyd (U.S. 5, 066,638). The Examiner acknowledges that Sterrett does not disclose a high temperature superconductor field winding, but cites Lloyd as disclosing this feature. We submit that there are greater differences between the teachings of Sterrett and Lloyd and the inventions recited in claims 1 and 27. In particular, we submit that neither Sterret nor Lloyd disclose a thermal reserve configured to absorb heat from the field winding, much less to maintain a temperature differential between the thermal reserve and the field winding not greater than about 10 K.

We further submit that Sterrett's radiation shield 42 is simply not a thermal reserve. Rather, Sterrett's shield 42 damper acts as a damper (eddy-current) shield to intercept any AC field that passes through the outer shield 60. The outer surface of 42 is separated by vacuum space 51 to prevent heat conduction from outer shield 60 to radiation shield 42. However, heat transfer still occurs between the two components by radiation. To minimize this heat transfer, the outer surface of radiation shield 42 is made reflective. But, shield 42 is NOT designed to act as thermal reserve. In fact, its temperature goes up as it absorbs radiation heat from component 60. Sterrett is trying to minimize this heat load and thereby minimize temperature rise of 42 above the superconducting winding temperature.

Because claims 2, 8, 12, and 13 depend from independent claim 1 and claims 28, 30, 32 and 33 depend from independent claim 27, these claims are patentable for at least the same reasons claims 1 and 27 are patentable.


The Examiner also rejected dependent claim 11 as unpatentable over Sterrett in view of Lloyd and further in view of Kullmann (U.S. 4, 063,122). The Examiner argues that Kullmann teaches a method of shrink fitting an outer cylinder onto a superconducting support body. But, Kullmann does not disclose that which was found to be lacking in Sterrett and Lloyd. We submit therefore that claim 11 is patentable for at least the same reason that independent claim 1 is patentable.

Accordingly, Applicant submits that all claims are in condition for allowance. Applicant has offered arguments as to why the Examiner's rejections are inappropriate. If the arguments are not acceptable to the Examiner, applicant may, for other reasons (e.g., economic), consider allowing the application to go abandoned. In that event, applicant submits that the abandonment is not an acquiescence that the claims are unpatentable in view of the Examiner's cited art.

Enclosed is a \$950.00 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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Frank R. Occhiuti
Reg. No. 35,306

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
Telephone: (617) 542-5070
Facsimile: (617) 542-8906